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ABSTRACT

The purpose of this illustrated manual is to increase the knowledge and facilitate the training of challenge course instructors at an outdoor education center in Texas. It is intended for use as a tool during staff training for new instructors and as a reference tool throughout the school year by all instructors. The manual presents information under the following headings: "Policies" (general, low elements, high elements, equipment, participants); "Definition of Terms"; "Equipment and Hardware"; "Knots"; "Leadership"; "Initiatives and Low Elements"; "High Elements"; "Processing"; and "Maps." (IAH)

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CHALLENGE COURSE MANUAL

An Instructor's Guide for The Outdoor Education Center

Julie A. Fassett

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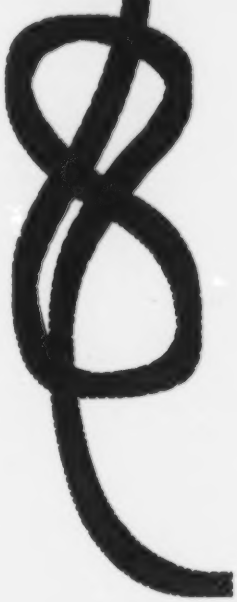
CHALLENGE COURSE MANUAL

An Instructor's Guide for The Outdoor Education Center



Julie A. Fassett

The Outdoor Education Center
Houston Independent School District
Rt. 2, Box 25B
Trinity, Texas 75862

PREFACE

Since the installation of the Outdoor Education Center at Camp Olympia in 1978, the facility and curriculum has grown by leaps and bounds. The Challenge Course is no exception. Timothy G. Kempfe, one of the coordinators of the Outdoor Education Center (O.E.C.) almost since its inception, has built and developed the course into one of quality standards. The high course now contains fourteen high elements. The two low course sites contain a total of eighteen different elements.

Timothy Kempfe, owner of Adventure Experiences, Inc., resigned from the Outdoor Education Center during the summer of 1991 in order to devote his time more fully to the development of the challenge course industry. It was under his guidance that the policies and procedures of the O.E.C. Challenge Course were originally written. These have been updated with the creation of this manual, but still possess standards and philosophies advocated by Adventure Experiences.

The purpose of this manual is to increase the knowledge and facilitate the training of challenge course instructors at the O.E.C. It is intended for use as a tool to be used during staff training for new instructors, as well as a continual reference to be used throughout the school year by all instructors, and should not, by any means, be considered as a substitute for skills training. The fifth grade program, due to scheduling constraints, does not take advantage of all that the Challenge Course has to offer. Only those elements utilized by the O.E.C. program are included in this document.

In the descriptions of each initiative and low element, variations are offered. In some cases, variations with an environmental or nonviolent flair are included. These were developed by the O.E.C. staff during staff training in January of 1991, in order to avoid violent hypothetical situations offered to the students during explanations of the elements.

I would like to extend thanks to Matthew Carlson for his constant feedback and encouragement, as well as to Timothy Kempfe and Adventure Experiences for their input, and to Tom Cosper, coordinator of the Outdoor Education Center, for allowing this manual to become an integral part of the Challenge Course.

-Julie Fassett
July 1991

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POLICIES

THESE POLICIES ARE TO BE STRICTLY FOLLOWED BY
ALL INSTRUCTORS ON THE CHALLENGE COURSE
REGARDLESS OF EXPERIENCE.

GENERAL

1. An instructor will be present whenever the challenge course is in use. (minimum age is 18 years)
2. All instructors and supervisory personnel will receive inservice training annually on the challenge course policies and procedures by coordinators and trained staff.
3. The instructor will, prior to any use of the challenge course, inspect the hardware, equipment, and surrounding areas for potential hazards. That inspector will check for wear and tear, needed repairs, vandalism, and environmental hazards. Easily corrected problems will be corrected on the spot. Other problems/concerns will be reported to the supervisor in charge of the course. Any potentially hazardous element will not be utilized until all related hazards have been corrected.
4. All equipment designated as removable will be removed from the elements when the challenge course is not in use and will be stored properly in the designated storage shed. That shed will be locked to prevent unauthorized use of equipment and/or the challenge course. The set-up ladder(s) will be locked to the outside of the shed. The rolling zipline ladder will be locked to its platform. The permanent ladders to both incline logs will be locked. The permanent set-up ladder to the climbing wall will be locked.
5. Everything has its place; all items will be put back where they belong. Wet ropes should be stretched out on the bleachers in the upstairs O-Dome to dry. Data use sheets will be completed before leaving the course area.
6. Emergency procedures will be posted in the shed. All instructors should be familiar with these procedures before utilizing the challenge course.
7. The challenge course will be inspected annually by an accredited builder.
8. All retired "soft" equipment will be destroyed by the supervisor of the course. All retired hardware will be removed from the Outdoor Education Center site by the supervisor of the course.

LOW ELEMENTS

1. Prior to using elements which require spotting, participants will practice proper spotting techniques. (Refer to **SPOTTING** section in this manual for proper spotting techniques.)
2. Participants will be spotted according to the set guidelines while on every initiative and low element.

HIGH ELEMENTS

1. When setting up high elements, the instructor will always be belayed through use of a static belay (lobster claws) using steel carabiners.
2. When setting up high elements, the belay system will entail one pulley on the belay cable, two locking steel carabiners side-by-side through the pulley, and the rope running through both carabiners. The two carabiners will have both gates on the side most visible to the belayer, with gates locked in opposite directions.
3. The exception to #2. above : When setting up the climbing wall, and two climbs are set up, the pulley may be eliminated from the belay system. Two steel carabiners, locked in opposite directions, are placed on the cable with the rope running through both carabiners. The purpose of this is to prevent the two pulleys from hitting each other when the weight of the climbers is on the cable.
4. All knots used in the dynamic belay systems will be backed-up with a double overhand back-up knot.
5. A stocked rescue bag will be placed at the zipline and at the climbing wall whenever these elements are in use.
6. All participants and instructors will return to the ground immediately during inclement weather. During thunder or lightning storms, ropes can be removed from the ground, leaving pulleys and carabiners on the elements until the weather clears.

EQUIPMENT

1. Each rope will be tactically and visually inspected for irregularities as it is uncoiled and put to use. Ropes with frayed ends will be recut and taped before being used again. Record the exact amount of inches cut off the rope.
2. Helmets, seat harnesses, and in some cases, chest harnesses will be worn by all participants. The condition, fit, and proper arrangement of this equipment will be inspected by the belayer prior to the participant starting each element.
3. Helmets will be UIL approved, placed on the head so as to protect the forehead, buckled securely under the chin, and checked for lateral stability.
4. Seat and chest harnesses for participants will be Headwall harnesses purchased specifically for the program. Seat harnesses, when worn, should be adjusted so as to pass the "three finger test". Belts will always be doubled back through the buckle(s).
5. Chest harnesses will be worn by all participants on the Pamper Pole or Pamper Rings.

PARTICIPANTS

1. Participants will remove all potentially dangerous objects, including jewelry and watches. Participants with long hair will be asked to tie it back and/or tuck it into the back of their shirt.
2. Participants will be led through a series of stretching exercises prior to attempting the elements.
3. Participants will be encouraged but never forced to attempt the elements. "Challenge by choice should be the philosophy of all instructors.

DEFINITION OF TERMS

SPOTTING: The primary safety system for low elements and initiatives. Proper spotting consists of group members in a flexed and alert stance with hands up ready to break the fall of the participant.

BELAY: To be secured at the end of a rope.

BELAYER: The instructor on the opposite end of the rope from the participant. The belayer is attached to the rope with a belay device used to break the fall and control the descent of the climber.

STATIC BELAY: A belay system in which the belay rope, usually multi-line, connects the participant directly into a belay point without the use of a belayer.

DYNAMIC BELAY: A belay system in which the rope, usually kernmantle, connects the participant to a belayer. On challenge courses, the dynamic belay system runs through a belay point between the participant and the belayer.

KERNMANTLE: A nylon rope with an inner core (kern) of twisted strands surrounded by a protective sheath (mantle). This rope is used for all dynamic belay systems on the O.E.C. Challenge Course.

MULTI-LINE: A nylon rope constructed with twisted strands (Hawser-laid). This rope is used for all static belay systems and lobster claws on the O.E.C. Challenge Course.

EQUIPMENT AND HARDWARE

(Generally, equipment refers to objects which can be carried and stored in the shed. Hardware refers to objects permanently attached to the elements.)

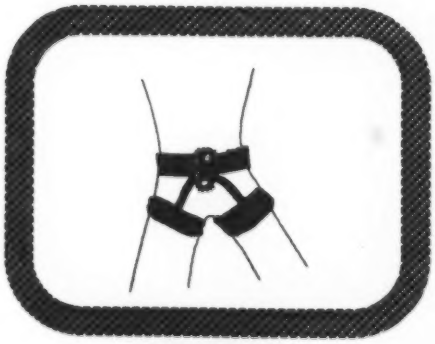
CARABINER
Aluminum Locking D
Steel Locking Oval

FIGURE-OF-EIGHT DESCENDER

PULLEY

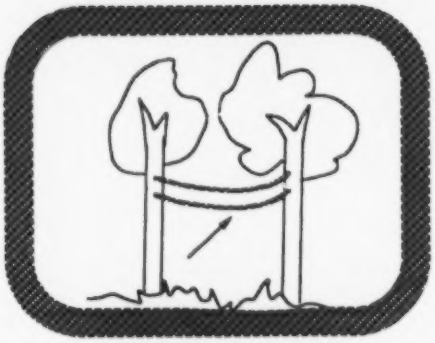
KERNMANTLE ROPE
11 mm. / 5500 lbs.

LOBSTER CLAWS
Multi-line

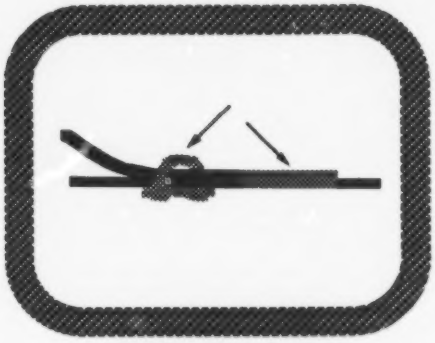


HARNESS
Headwall

EQUIPMENT AND HARDWARE



AIRCRAFT CABLE
7 x 19 / 3/8" / 14,400 lbs.

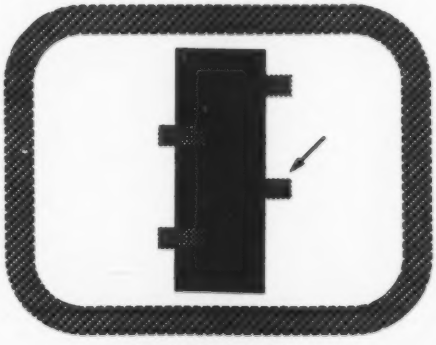


CABLE CLAMPS AND SLEEVE
14,400 lbs.

BOLTS
22,000 lbs.

STRAND VICE
14,400 lbs.

STAPLES
3"



PVC PEGS
1 1/4 " diameter

BOWLINE ON A BIGHT

THIS KNOT IS USED ON MOST OF THE HIGH ELEMENTS INCLUDING INCLINE LOG/BURMA, INCLINE LOG/2-LINE, 2-LINE TUBE, PAMPER RINGS, PAMPER POLE, AND THE BERMUDA TRIANGLE.

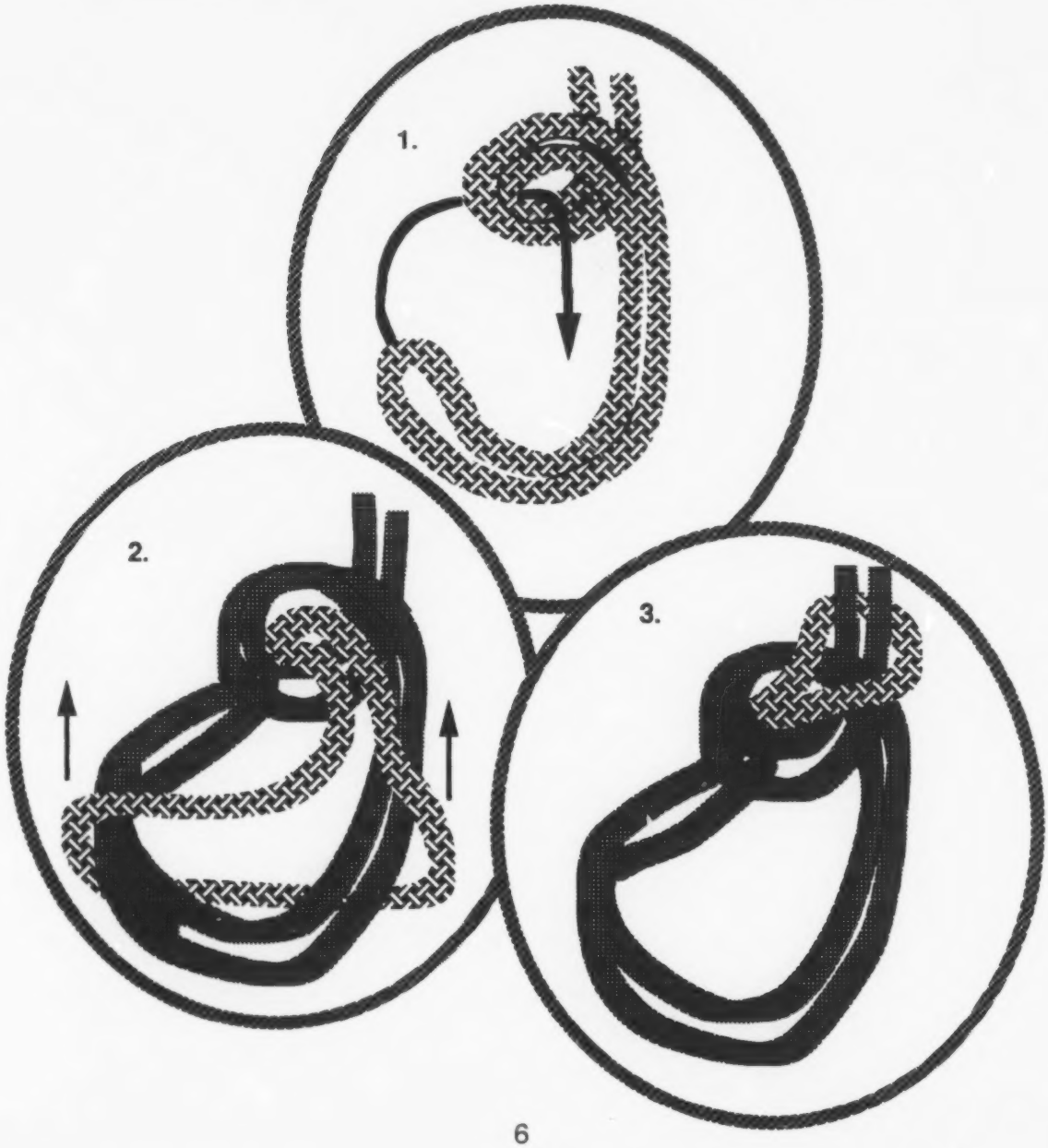
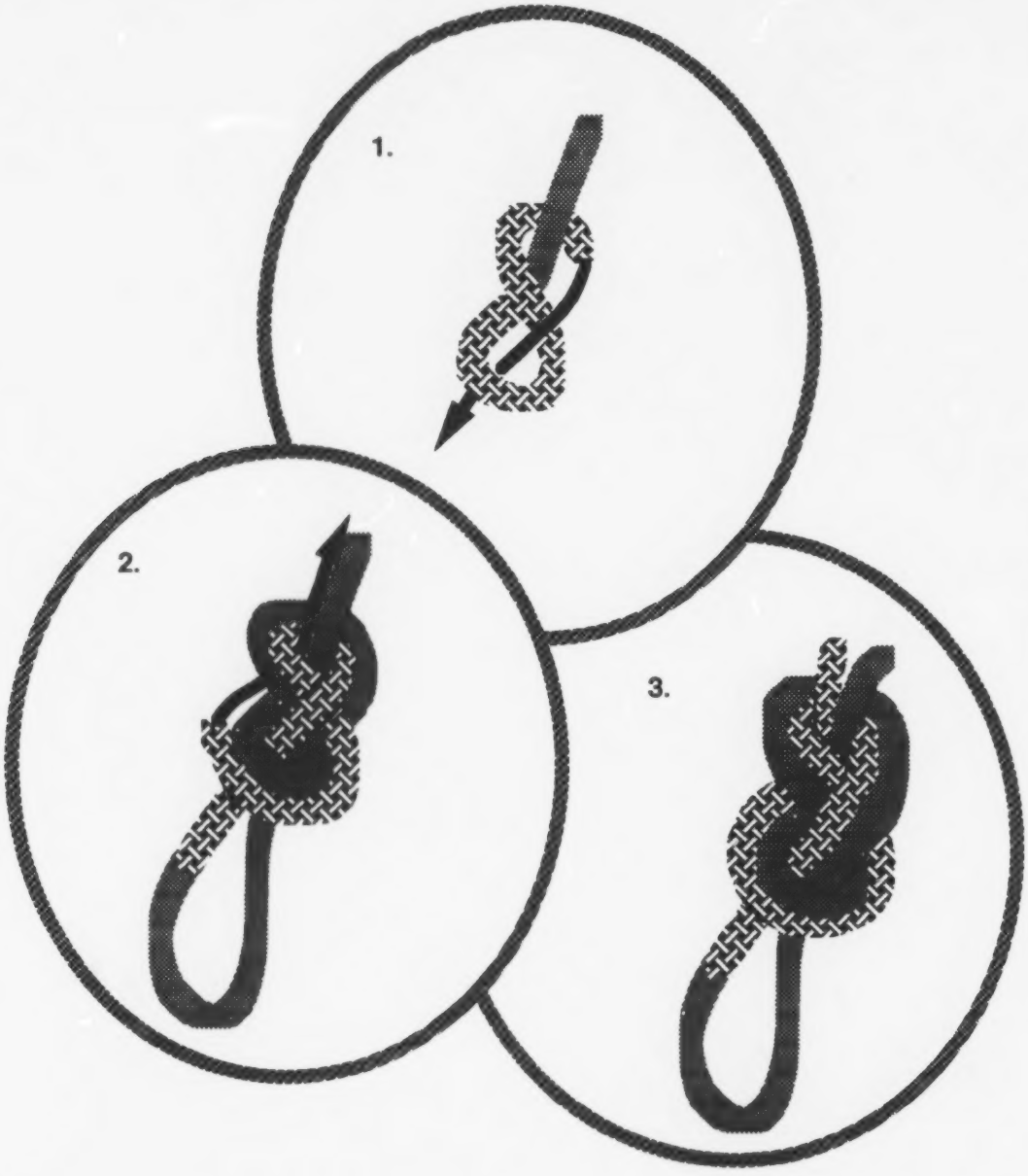


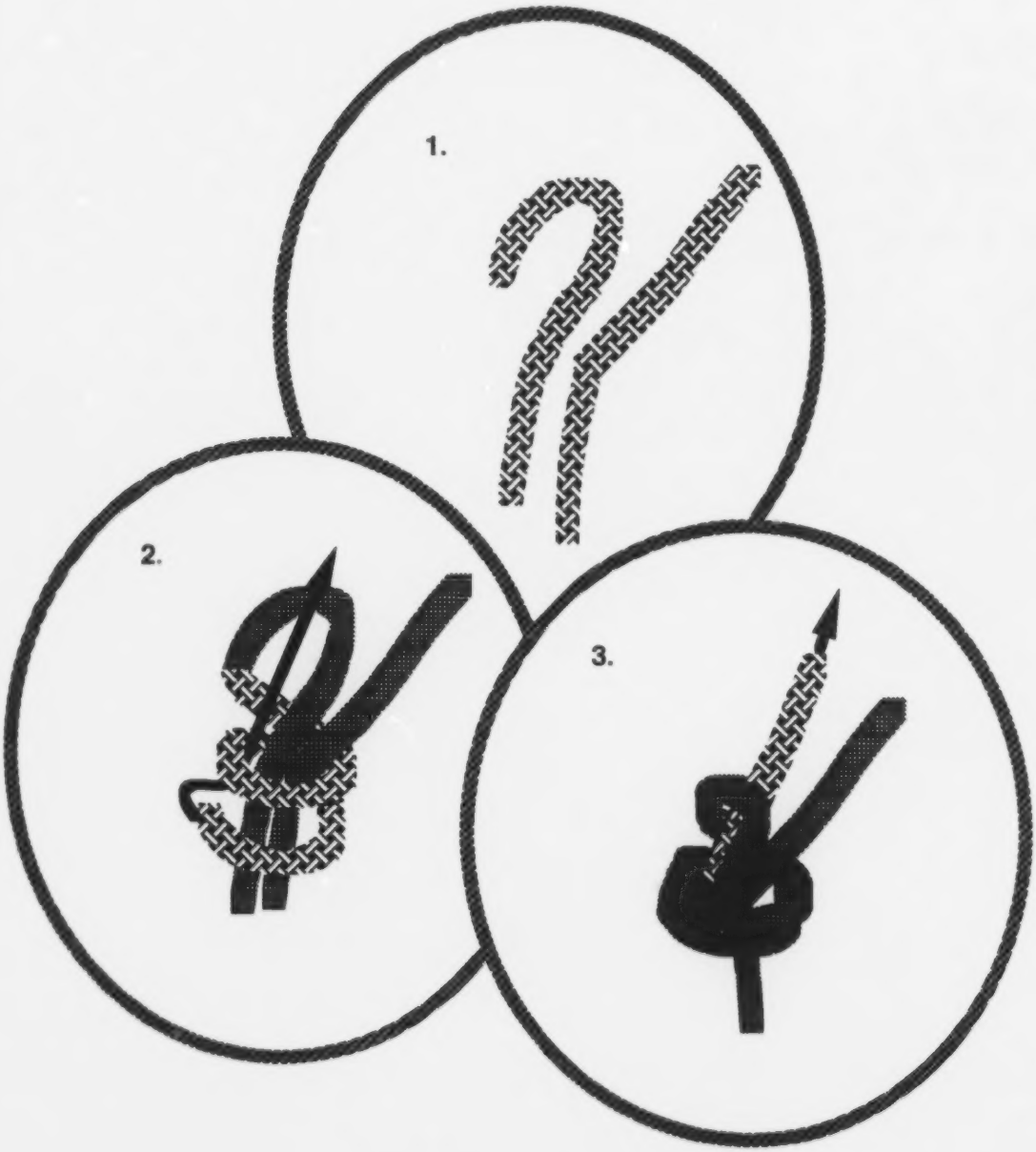
FIGURE-OF-EIGHT FOLLOW THROUGH

THIS KNOT IS USED ON THE CLIMBING WALL AND THE DANGLE-DUO.
(THE DANGLE-DUO IS NOT USED WITH THE FIFTH GRADE PROGRAM.)



DOUBLE OVERHAND BACK-UP

THIS KNOT IS USED TO BACK-UP EVERY KNOT WHICH ATTACHES A CLIMBER TO HIS/HER HARNESS.



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SEQUENCING

The following initiatives and low elements are divided into three levels: beginning, middle, and end. These levels are divided in terms of the amount of touching between participants, amount of trust involved to accomplish the task, and the amount of risk involved.

BEGINNING:

People Pass
Skis
Lilly Pads**
Bike Tires**
Swinging Log*
Mountains
Knots**
Traffic Jam**

MIDDLE:

Nitro Crossing
All Aboard
Swinging Tires
Spider Web*

END:

Porthole*
Ten Foot Wall*
Giant's Finger*

* an initiative or low element which requires students to spot other students.

** an initiative which is not a constructed element on the course, and therefore is not described in the context of this manual.

CONSEQUENCES

Quite often, consequences are given to a group if they are unable to adhere to the guidelines given to them during a task. For example, during the People Pass, the idea is for the students to rearrange themselves on the log without touching the ground. If a student loses his/her balance and touches the ground, a consequence might be given to the group. Perhaps the person who fell will be blindfolded, or will not be able to talk.

Consequences are intended to cause the group to think before they act--to discuss many possible solutions before trying the best one. However, with fifth grade students, they are apt to jump right into the activity and skip the thinking stage. If this happens, consequences need to be administered fairly . Otherwise, the group may become too frustrated to continue or the person who fell may become a scapegoat for the group's "failure" to complete the task. On some of the elements, a group may respond better if three or more "touches to the ground" are allowed before a consequence is given.

In contrast to setting consequences, there may be times when administering privileges are appropriate. If the group is especially large in number, or contains a handicapped or severely overweight person, then the instructor may want to give a privilege. Perhaps the group will be allowed to "fly" one or two people across the element. Perhaps the element would work better if the group was divided in half and each half attempts the element on their own.

No matter what the element is, an instructor should always examine the logistics and needs of their group before administering any consequences or privileges. The idea is to lead a group through an initiative so that no student feels humiliated or is allowed to become a scapegoat. The underlying philosophy is to act fairly and intelligently.

SPOTTING

Spotting is the main safety system used during low elements and initiative games. The purpose of spotting is to prevent the participant(s) from sustaining an injury while attempting an element. Low elements often result in the human body moving suddenly in unexpected ways. Without spotting instruction and practice, the chances of an injury occurring rises sharply.

The basic spotting position entails the following:

-one foot in front of the other with knees slightly flexed
-hands up with one slightly higher than the other
-fingers together, thumbs in
-eyes on the participant at all times
-stand close to the participant without interfering with their movement
-maintain an active position, ready to move at any time.

When teaching spotting techniques to students, the activities should be sequenced from easier to more difficult spotting. A recommended sequence is: 1) Willow in the Wind (Trust Circle), 2) Three Person Standing Trust Fall, and then 3)The Gauntlet (Dizzy Person Walk). The elements and initiatives which require spotting should not be attempted until the group has clearly mastered the spotting techniques taught to them.

Other guidelines to be followed at all times include the following:

1. Jewelry, watches, and other items which could cause injury should be removed.
2. Small or weak students should not spot heavier ones without help.
3. Stronger spotters should be placed next to weaker ones.
4. Participants should have a minimum of three spotters at all times.
5. Instructors should be familiar with the spotting requirements of an element before leading groups through it.

COMMUNICATION

The following commands should be used for low elements and initiatives which require students spotting other students:

Participant:	"Spotters ready?"
Spotters:	"Ready!"
Participant:	"Falling!"
Spotters:	"Fall!" or "Fall on!"

The following commands should be used before climbing the high elements:

Participant:	"On belay?"
Belayer:	"Belay on!"
Participant:	"Climbing!" or "On Climb?"
Belayer:	"Climb!" or "Climb on!"

The Zipline requires these commands:

Participant:	"On zip?!"
Ladder person:	"Zip on!"

Other commands which will be helpful as a participant is going through an element:

Participant:	"Slack!" (belayer gives 12" of slack)
Participant:	"Up rope!" (belayer takes all slack out of the rope)
Participant:	"Falling!" (belayer brakes and steps backward)

VISUAL INSPECTIONS

Before any high or low element is attempted, a visual inspection should always take place. This inspection involves examining these four factors: the surrounding environment, the element, the equipment, and the participant. Specifics on exactly what should be covered in this inspection are listed below.

1. Surrounding Environment
   a. roots, sticks, stones, fire ants on the ground
   b. dead branches hanging overhead
   c. weather forecast

2. Element
   a. hardware properly intact
   b. wood parts free of splinters and cracks
   c. tires checked for wasps or bees

3. Equipment
   a. harnesses free of rips and frayed edges
   b. buckles, helmets, and metal equipment free of damage
   c. metal equipment free of scoring
   d. ropes inspected tactically and visually
   d. belay system set up properly

4. Participant
   a. jewelry, watches, and other dangerous objects removed
   b. long hair tied back and tucked in back of shirt
   c. if on high element: helmet, harness, belay system all attached properly
   d. communicates with belayer before climbing

INITIATIVES AND LOW ELEMENTS

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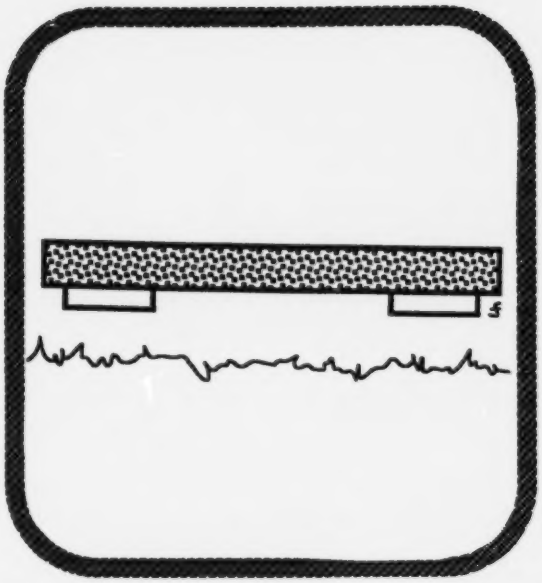
PEOPLE PASS

(T.P. SHUFFLE)



OBJECTIVE: To rearrange the group from their starting positions on the log or telephone pole without touching the ground.

INSTRUCTOR POSITION: Spotting in front of the students who are moving at the time.

VARIATIONS:

1. Have the students arrange themselves by birthdate, height, or shoe size.
2. Have the students arrange themselves by the size of the animal they chose before hearing the explanation of the element.
3. Divide the group in half. Each half must switch places on the log.

SAFETY CONCERNS AND SUGGESTIONS:

1. For fifth graders, balancing on the log can be difficult. Keep this in mind when setting consequences. Some groups may require three or more touches to the ground before a consequence is administered.
2. Instruct students to step off the log if falling is inevitable.

SKIS

(TROLLEY, LUNAR WALKERS)

OBJECTIVE: To use the skis to move the group from point A to point B without stepping on the ground.

INSTRUCTOR POSITION: Spotting toward the rear of the group, watching for students pushing or leaning too much between steps. Taking time in between steps should alleviate any falling.

VARIATIONS:

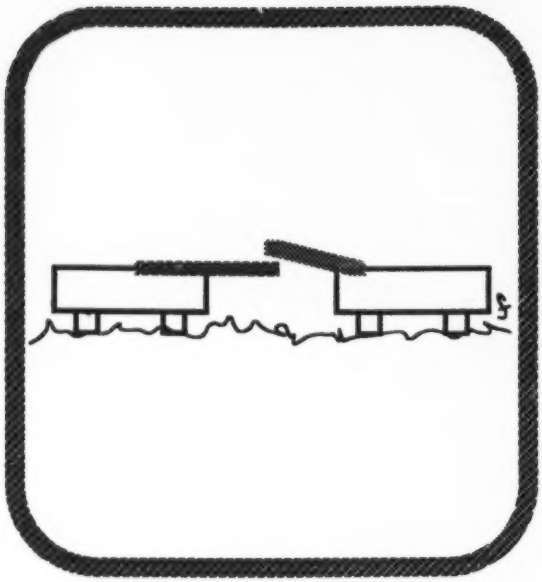
1. Divide the group in half if they cannot all stand on the skis comfortably.
2. Introduce the skis as a giant caterpillar which must travel a certain distance before turning into a beautiful butterfly.
3. Introduce the skis as a vehicle for traveling over oil spills. It is the group's job to travel across the spill to rescue animals (branches or pine cones) caught in the oil.

SAFETY CONCERNS AND SUGGESTIONS:

1. It is difficult to accomplish this task without ever touching the ground. Keep this in mind and administer consequences fairly.

MOUNTAINS

(ISLANDS)



OBJECTIVE: To use two boards to move the group from one platform to the second platform and then to the third without touching the ground.

INSTRUCTOR POSITION: Spotting each person crossing the "bridge", being especially alert when the person steps near the joining of the two boards.

VARIATIONS:

1. Arrange the mountains in an equilateral triangle. Students stand on any of the three platforms to start. Each student moves to a different platform. This set-up helps with large groups or ones which are not comfortable being close together.
2. Introduce the platforms as geographical regions. The students are a group of animals (wolves, caribou) migrating together during season changes.

SAFETY CONCERNS AND SUGGESTIONS:

1. Do not allow students to jump or throw boards across the mountains.
2. Before a student crosses the bridge, use your foot to apply pressure to the place where the two boards join. If the boards cannot hold this pressure, more body weight must be added at the end of the board.

SWINGING LOG

OBJECTIVE: To move the group, one at a time, from one end of the log to the other.

INSTRUCTOR POSITION: At the end of the line of the spotters, preceding the participant, and controlling the swing of the log. The instructor also spots the participant off the end of the log.

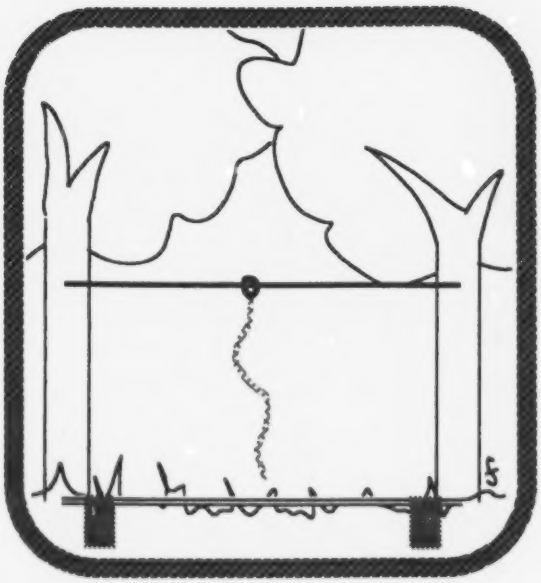
VARIATIONS:

1. Introduce the log as a conveyor belt at the recycling center. Each student represents the item of their choice (aluminum can, glass bottle) which is moving down the belt.
2. Introduce the log as a wishing bridge for the Earth. Each participant can make a wish to improve the Earth as they move down the log.

SAFETY CONCERNS AND SUGGESTIONS:

1. Instruct students to step off the log if falling is inevitable.
2. Instruct participants to move slowly down the log to avoid outrunning their spotters.

NITRO CROSSING
(SWING FOR LIFE)



OBJECTIVE: To use the rope to move the group from one boundary to the other. A bucket of water or pine cones also must move across without spilling. Once a person has crossed over, he/she may not return to the first side.

INSTRUCTOR POSITION: Spotting each person across the rope.

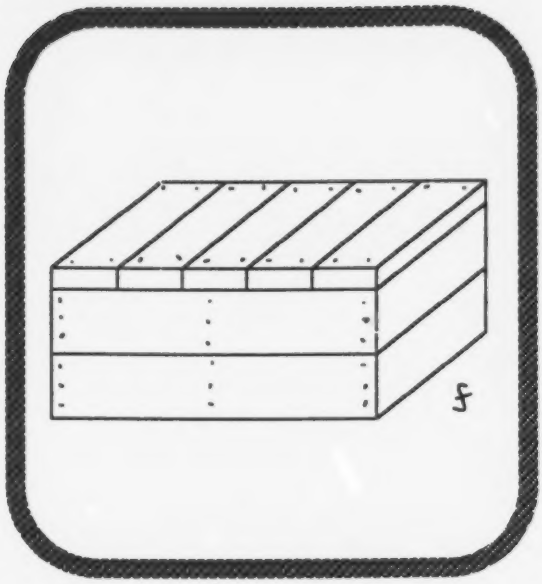
VARIATIONS:

1. Each student finds a pine cone which represents the natural resource of their choice, and places it in the bucket. The group can "save the Earth" by carrying these carefully over into the next century.
2. Introduce the bucket as being full of seeds, which the group must carry to a clear-cut area for planting.

SAFETY CONCERNS AND SUGGESTIONS:

1. Instruct students to hold the rope at the highest knot, so that they will not pendulum into the ground.
2. Examine your group before attempting this element. Some students cannot hold their weight on the rope. Avoid allowing these students to become scapegoats and adjust consequences accordingly.

ALL ABOARD



OBJECTIVE: To arrange all students on the platform so that none are touching the ground.

INSTRUCTOR POSITION: Spotting at the weakest part of the group.

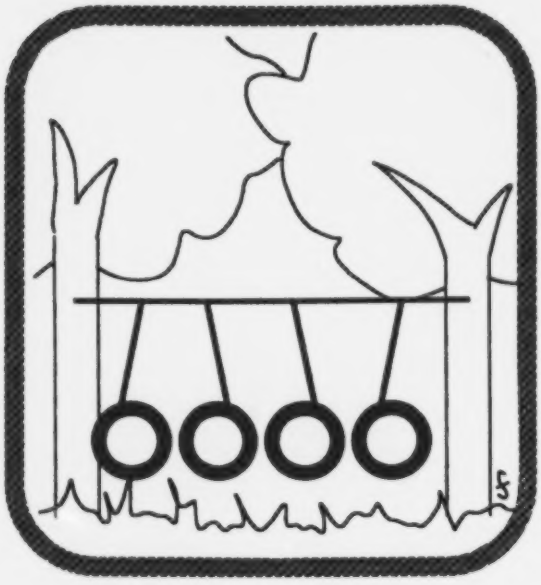
VARIATIONS:

1. Slowly prepare the students for the task by asking for subsets of the whole group. For example, ask for 12 hands on the platform, then 6 feet and 12 hands, etc.
2. Present the objective as, "No feet can touch the ground". This allows a possible solution of all students sitting on the ground with their feet on the platform. It may take them a while to realize this is the easiest solution.
3. Introduce the platform as a mass transit vehicle which runs on liquid hydrogen fuel, which is renewable and nearly pollution-free. Give the students a full water bottle, which represents the fuel. For every student who cannot get on the platform, the group loses 1/2 cup of fuel. The vehicle needs at least 2 cups of fuel to operate.

SAFETY CONCERNS AND SUGGESTIONS:

1. If the group has more than ten members, consider dividing the group in half or requiring that only a portion of the students must balance on the platform.
2. Avoid allowing students to build human pyramids or sit on another's shoulders.
3. Instruct students to go ahead and step off the platform if falling is inevitable.

SWINGING TIRES



OBJECTIVE: To use the tires to move the group from point A to point B without touching the ground.

INSTRUCTOR POSITION: Spotting the students moving through the tires.

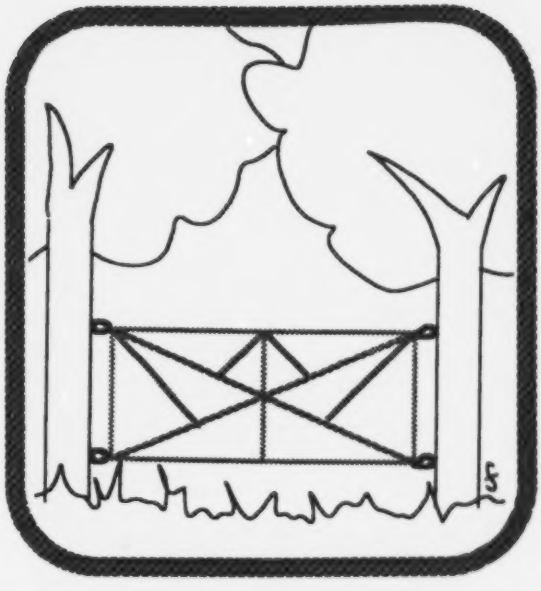
VARIATIONS:

1. Have the group also move a heavy object with a handle through the tires.

SAFETY CONCERNS AND SUGGESTIONS:

1. Students may not sit or stand on the very top part of the tires.
2. Students may not jump from tire to tire.
3. Only one person at a time is allowed on each tire.
4. Before allowing students to approach the element, hit the tires with a large stick to scare away wasps or bees that may be inside them.

SPIDER WEB



OBJECTIVE: To move the group from one side of the web, through the holes, to the other side of the web without letting the spider (a stick or pine cone) fall to the ground. Once a student has moved successfully through a hole, he/she may not return to the first side.

INSTRUCTOR POSITION: Spotting the head and neck area of the person being lifted through the web, moving quickly to the most needed side of the web.

VARIATIONS:

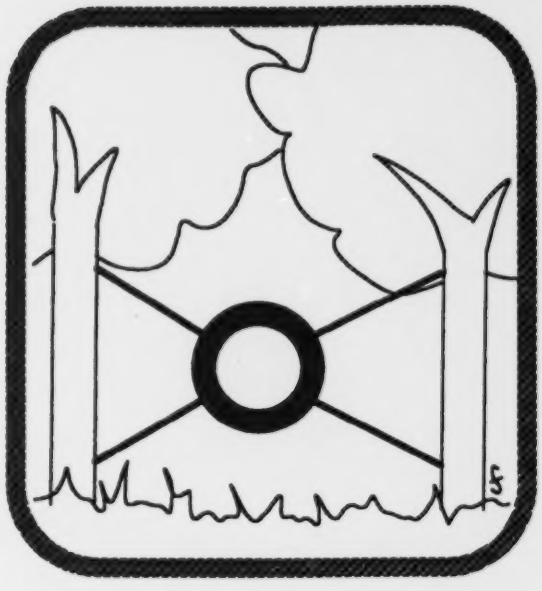
1. Allow the group to use only the low holes, as many times as desired, so that spotting does not need to be a concern.
2. Introduce the element as the Web of Life with each student representing a key part such as soil, sun, water, plants, etc.
3. Introduce the spider as the planet Earth...We must travel through life carefully to avoid destroying the Earth and letting it crash into destruction.

SAFETY CONCERNS AND SUGGESTIONS:

1. Every person being lifted needs at least three people on each side of the web.
2. People being lifted should be lowered feet first and hands should remain on the participants until they are steady on their feet.

PORTHOLE

(REBIRTH)



OBJECTIVE: To move the group, through the tire, without using the cables or trees. Usually, once a student has gone through the tire, he/she may not return to the first side to help.

INSTRUCTOR POSITION: Spotting the head and neck area of the person moving through the tire, quickly ducking under the tire to whatever side is necessary.

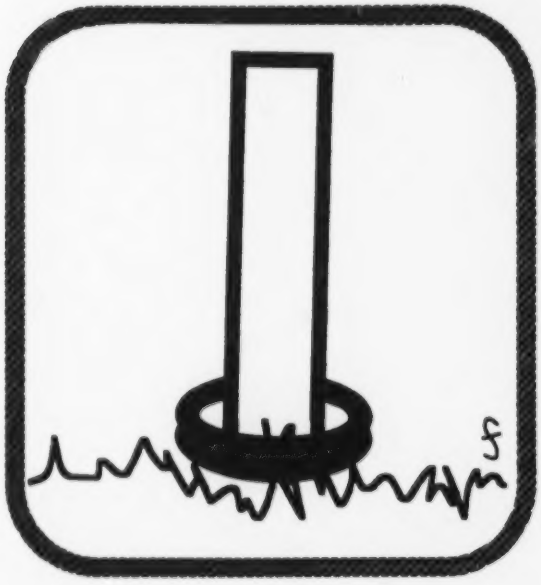
VARIATIONS:

1. For the Culminating Block, ask questions about the O.E.C. concepts. To answer a question, the group must send someone through the tire.
2. For each person that moves successfully through the tire, the group receives a piece of a puzzle. The pieces form a picture or a message.

SAFETY CONCERNS AND SUGGESTIONS:

1. Before students approach the tire, hit it with a large stick to frighten away any wasps or bees that might be inside.

GIANT'S FINGER



OBJECTIVE: To remove the inner tube from the post without throwing it.

INSTRUCTOR POSITION: Spotting the person highest off the ground.

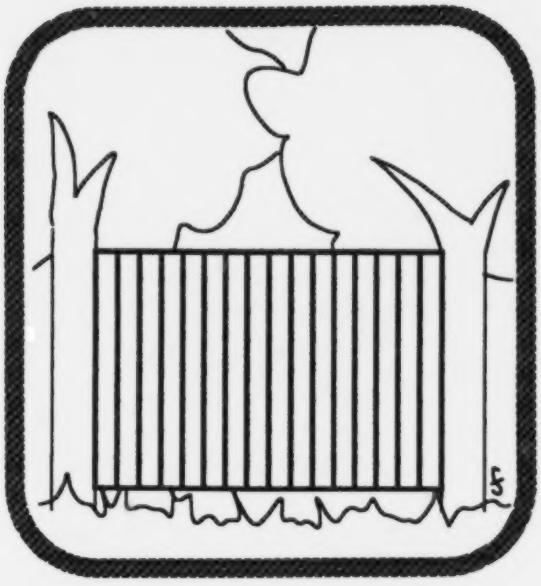
VARIATIONS:

1. Divide the group in half. Half the group must take the inner tube off the post. The other half must put the inner tube back on the post without throwing it or dropping it.
2. Discard the inner tube. Half the group tries to place a piece of tape as high as possible on the post. The other half tries to take it off.

SAFETY CONCERNS AND SUGGESTIONS:

1. All persons not directly involved in lifting should be spotting.
2. Heavier persons should not be lifted by smaller, weaker persons.

TEN FOOT WALL



OBJECTIVE: To move the group up and over the wall without using the sides or trees. Usually, once over the wall and back on the ground, a person takes the role of a spotter and is not allowed to lift anyone.

INSTRUCTOR POSITION: It is best to have two instructors. One is located at the top of the wall. The other is located against the wall and spotting the person climbing.

VARIATIONS:

1. Allow everyone to help everyone over the wall, regardless of whether they have already climbed.

SAFETY CONCERNS AND SUGGESTIONS:

1. Most falls are against the wall, and directly to the right or left.
2. Students' heads may never be lower than their feet.
3. Students on top of the wall must keep their feet planted on the platform.
4. Heavier students should not be lifted by smaller, weaker students.
5. Belts, shoelaces, and other articles of clothes that cannot hold body weight should not be used to lift the last person(s) over.
6. All students must be spotted down the ladder in back of the wall.

HIGH ELEMENTS

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-INCLINE LOG.....29
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-TWO-LINE BRIDGE.....31
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-TWO-LINE TUBE.....34
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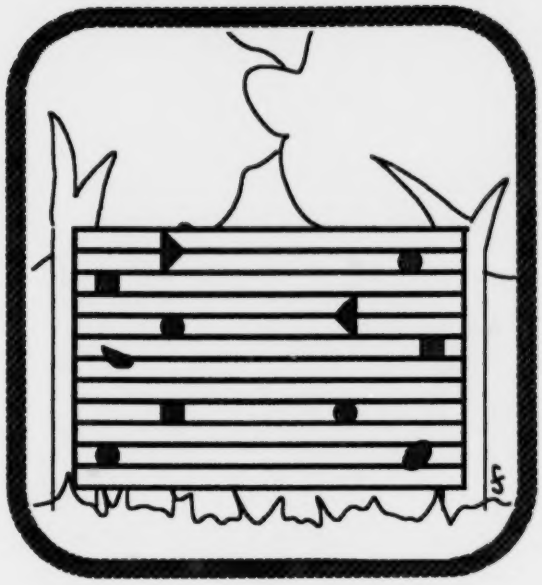
Balance Beam
Tired Two-Line
Multi-Vine

CLIMBING WALL



OBJECTIVE: To climb the wall using the wooden blocks as hand and foot holds.

DYNAMIC BELAY SYSTEM:

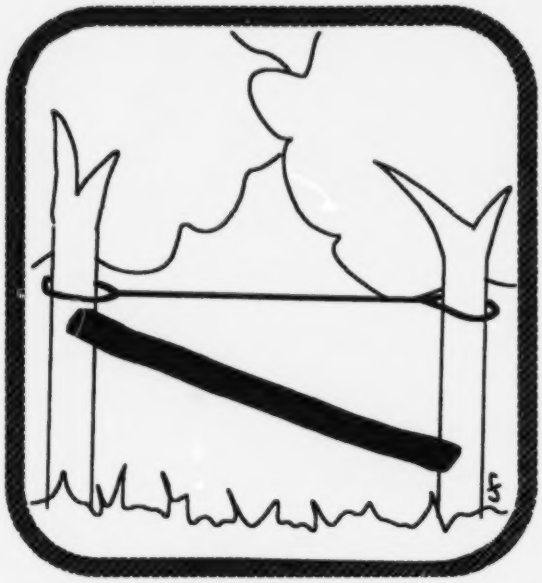
1) Kernmantle rope runs from the belayer with a Figure-of-Eight Descender and aluminum carabiner to:

2) Two steel opposite-locking carabiners attached to the belay cable with a pulley to:

3) The front belay loop of the participant's harness, attached with a Figure-of-Eight Follow Through knot backed-up with a Double Overhand knot.

(NOTE: If more than one climb is set up on the same side of the wall, delete the pulleys from the belay system. Place the carabiners directly over the belay cable. This is to prevent the two pulleys from colliding when weight is placed on the belay cable from the climbers.)

INCLINE LOG



(One of the Incline Log elements connects to the Burma Bridge. The other Incline Log element connects to the Two-Line Bridge.)

OBJECTIVE: To climb the permanent ladder, and then walk up the inclined log without touching anything with the hands.

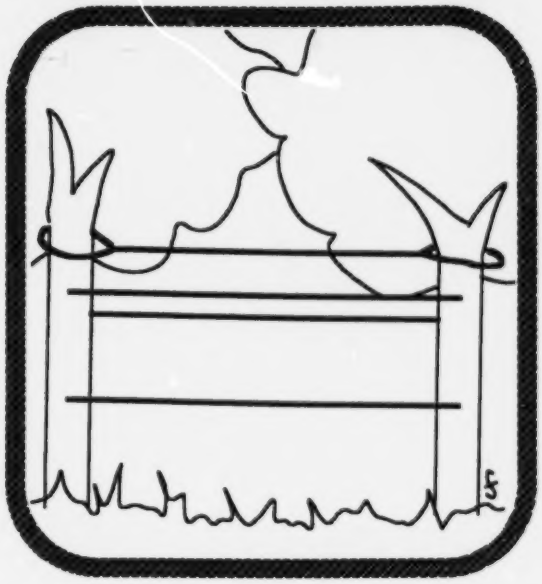
DYNAMIC BELAY SYSTEM:

1) Kernmantle rope runs from the belayer with a Figure-of-Eight Descender with an aluminum carabiner to:

2) Two opposite-locking steel carabiners attached to the belay cable with a pulley to:

3) The front belay loop of the participant's harness attached with one aluminum carabiner and a Bowline on a Bight backed-up with a Double Overhand knot.

BURMA BRIDGE



(This element is approached by the Incline Log and ends at the Zipline.)

OBJECTIVE: To walk across the cable holding onto two hand cables.

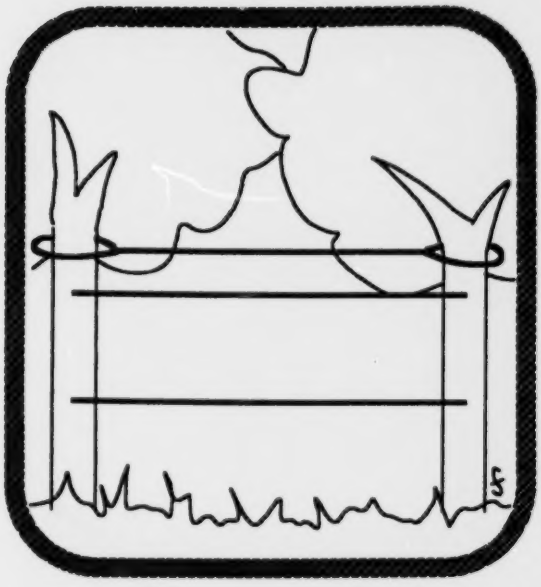
DYNAMIC BELAY SYSTEM:

1) Kernmantle rope runs from the belayer with a Figure-of-Eight Descender and an aluminum carabiner to:

2) Two steel opposite-locking carabiners attached to the belay cable with a pulley to:

3) The front loop of the participant's harness attached with an aluminum carabiner and a Bowline on a Bight backed-up with a Double Overhand knot.

TWO-LINE BRIDGE



(POSTMAN'S WALK)

(This element is approached by the Incline Log and ends at the Zipline.)

OBJECTIVE: To walk across the cable holding onto the one hand cable.

DYNAMIC BELAY SYSTEM:

1) Kernmantle rope runs from the belayer with a Figure-of-Eight Descender and an aluminum carabiner to:

2) Two steel opposite-locking carabiners attached to the belay cable with a pulley to:

3) The front belay loop of the participant's harness attached with one aluminum carabiner and a Bowline on a Bight backed-up with a Double Overhand knot.

ZIPLINE

(The Zipline is approached by the Burma Bridge or the Two-line Bridge)

OBJECTIVE: To travel from the Zipline platform, down the cable to the portable ladder platform.

STATIC BELAY SYSTEM:

1) Multi-line rope runs from a steel carabiner attached to the Zipline pulley to:

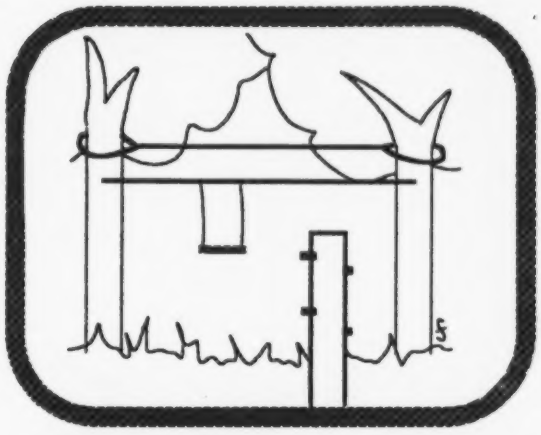
2) The front belay loop of the participant's harness attached with a steel carabiner.

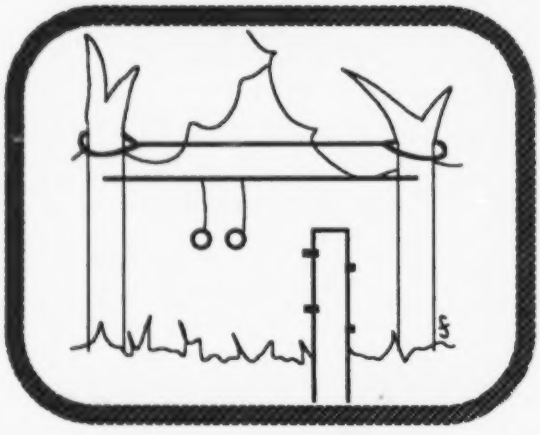
COMMANDS:

When a participant is attached to the Zipline pulley and is ready to go down the Zipline, the communication between the participant and the person running the portable ladder is:

Participant:	"On zip?"
Instructor:	"Zip on!" (after making sure the ladder is out of the way and there is nothing obstructing the pathway)

PAMPER POLE
PAMPER RINGS





OBJECTIVE: To climb the pole, stand on the platform, and jump to catch either a trapeze bar or the hanging rings.

DYNAMIC BELAY SYSTEM:

1) Kernmantle rope runs from belayer using a butt belay with two aluminum guide carabiners to:

2) The Just Right Descender post to:

3) The Sheer Reduction Device attached to the belay cable to:

4) The rear belay loop of the participant's chest and seat harness, attached with three opposite-locking aluminum carabiners and a Bowline on a Bight backed-up with a Double Overhand knot.

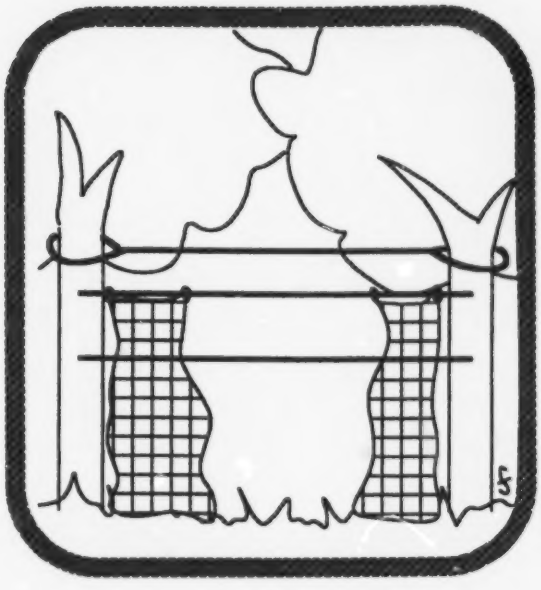
COMMANDS:

Once a participant has stood on top of the platform and is ready to jump, the command given to the belayer is:

"One, two, three, Jump!"

Upon hearing the word, "Jump!", the belayer is cued to move backward in order to take up the slack caused by the climber jumping toward the belayer.

TWO-LINE TUBE



OBJECTIVE: To climb the cargo net, walk across the cable holding onto the hand cable, and climb down through the middle of the cargo tube. The next participant will climb up through the tube first, then cross the cable, then climb back down the cargo net.

DYNAMIC BELAY SYSTEM:

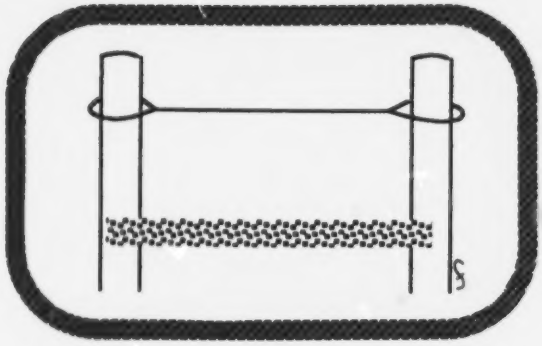
1) Kernmantle rope runs from the belayer with a Figure-of-Eight Descender and an aluminum carabiner to:

2) Two opposite-locking steel carabiners attached to the belay cable with a pulley to:

3) The front belay loop of the participant's harness attached with an aluminum carabiner and a Bowline on a Bight backed-up with a Double Overhand knot.

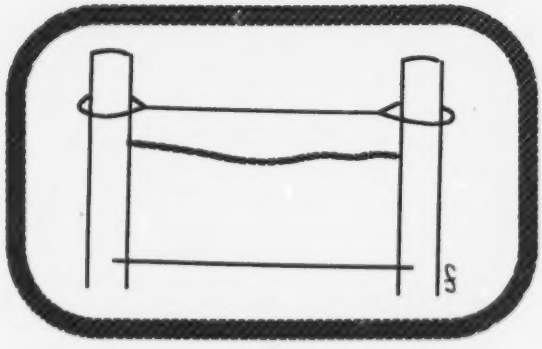
THE BERMUDA TRIANGLE:

1. BALANCE BEAM



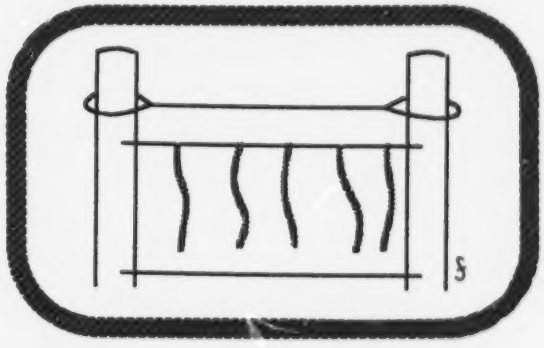
OBJECTIVE: To walk across the beam without touching anything with the hands.

2. TIRED TWO-LINE



OBJECTIVE: To walk across the cable with hands holding the multi-line rope. This rope can be adjusted with a Prusik knot to achieve varying amounts of slack.

3. MULTI-VINE



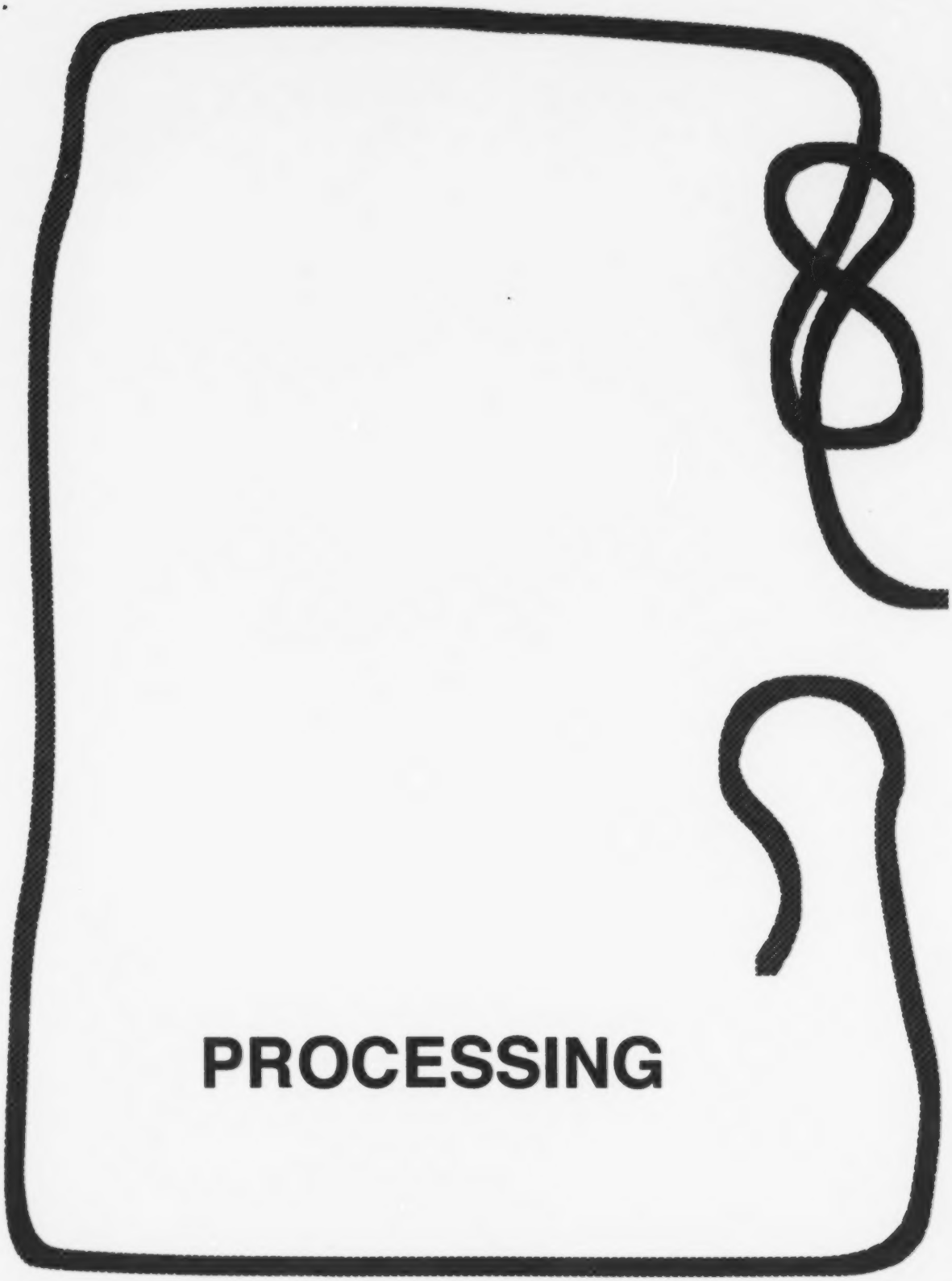
OBJECTIVE: To walk across the cable holding onto the hanging lines.

DYNAMIC BELAY SYSTEM
(on all three elements):

1) Kernmantle rope runs from the belayer with Figure-of-Eight Descender and aluminum carabiner to:

2) Two steel opposite locking carabiners attached to the belay cable with a pulley to:

3) The front belay loop of the participant's harness attached with one aluminum carabiner and a Bowline on a Bight backed-up with a Double Overhand knot.



PROCESSING

PROCESSING

What exactly is processing? Sometimes referred to as debriefing or wrapping-up, perhaps the most common definition of processing is the "art of guided reflection". In other words, it is a time intentionally set aside by the instructor to guide the group in reflecting upon their challenge course experience. Karl Rohnke, in Cowstails and Cobras II (1989), points out that processing should never "be looked upon as a separate activity". It is an integral part of the entire challenge experience.

Why bother processing? Isn't the experience itself intense enough? To put it bluntly..... no, it's not. In order to have "learned" something, a change in behavior must take place (Hamachek, 1985). In order for a change of behavior to occur for all participants who have just been through a challenge course experience, processing must take place in order to reveal to the group what "learning" has happened. Camille Bunting, in Venture Dynamics (1985), states that learning from past experiences must take place "in order to aid in making future decisions." The transfer of learning which she is referring to is probably the most often expressed outcome of processing. Processing can answer the participant's questions, "What does this experience have to do with real life?" and " How can it help me with my life?"

Dr. Bunting offers five criteria for an instructor to use in group processing :

1) **Select an appropriate setting.**
   (a quiet place, free of distractions)
2) **Allow enough time.**
3) **Use an appropriate progression.**
4) **Organize the group.**
   (A circle allows everyone to see and hear,
   and encourages a sense of closeness.)
5) **Know the desired objectives.**

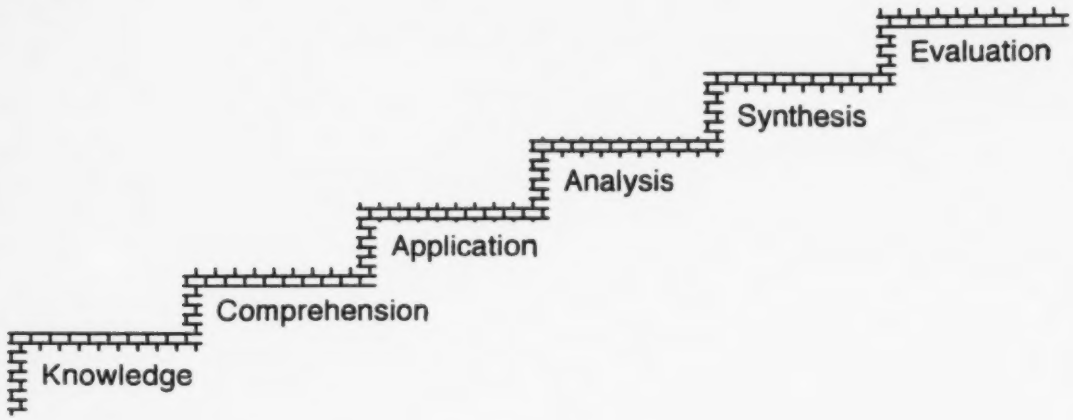
Before transfer of the experience to real life can happen--before the experience can be made meaningful to the participant--the group needs to be slowly "warmed up" to the idea of sharing thoughts. Otherwise, a question like, "So what did you all learn from this experience today?" will be met with shrugging shoulders and a lot of silent stares. Clifford Knapp, as cited in Cowstails and Cobras II (1989), explains a simple three-step approach to processing. The steps are called What?, So What?, and Now What? They are explained below.

What? This step simply entails asking the students to explain in some way what happened (e.g. "We all talked and then we lifted everyone up and put them through the tire."). This is an easy task for them to handle since they are simply stating the facts. No emotions or feelings are being revealed, and yet sharing a common experience is definitely happening. Two methods used to approach this could be The Go Around (everyone in the circle contributes a word or sentence describing what happened) and The Memory Game. In The Memory Game, one person begins by describing what happened. If anyone in the group feels that something has been missed, he/she says, "Hold it!" This new person then continues the description until someone else says, "Hold it!"

So What? This step makes the shift from describing what happened to interpreting what happened. Now that the group has begun to talk, it is much easier to begin to discuss feelings and emotions. The Go Around and The Memory Game can again be used. Replace descriptions of what happened to descriptions of what feelings happened. An additional method which might be useful is called The Whip, during which everyone in the circle finishes an open-ended sentence such as, "I'm glad that I..."

Now What? This is the place where you eventually want to bring the group. This step is the process of taking what has been learned during the So What? stage and transferring it into future and/or real life situations. Questions such as "What did we learn from the People Pass that might help us in the next element?" and "What have you learned from the Zipline that might help you next time you take a test at school?" would be used in this step.

Interestingly, these three steps are directly correlated to Bloom's Taxonomy, the underlying network of questioning techniques used in the field of education. The six levels of this taxonomy are illustrated
below.

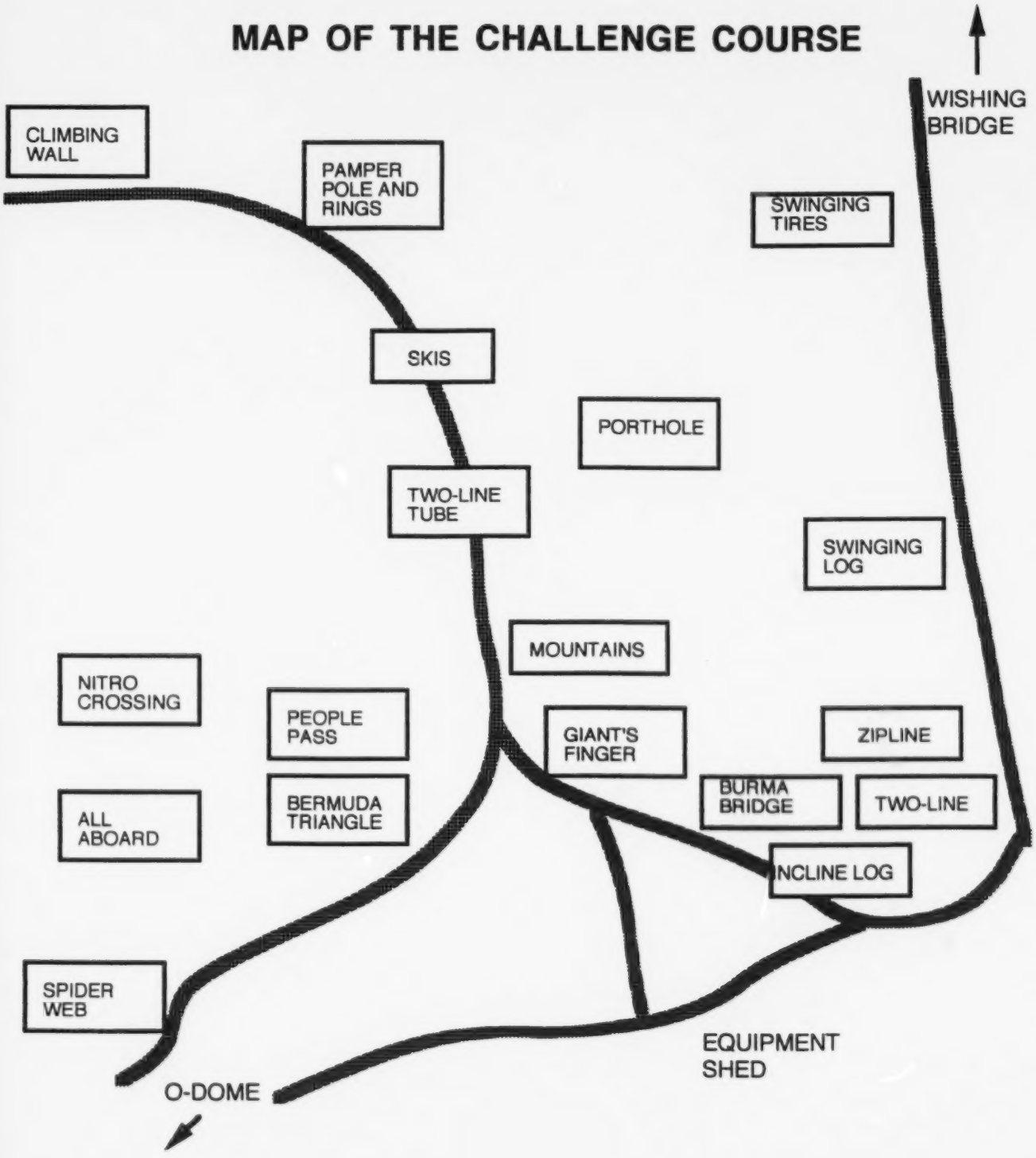


During processing, try beginning your questions with key verbs from Bloom's Taxonomy. If the students are slow or seem frustrated in answering, perhaps you have moved too quickly. Keep in mind that some silence is okay, and that wait time allows the group to reflect "deeper". Try dropping back down a step on the taxonomy and ask questions at this lower level until the group is ready to move up. Some of the key verbs from Bloom are listed below.

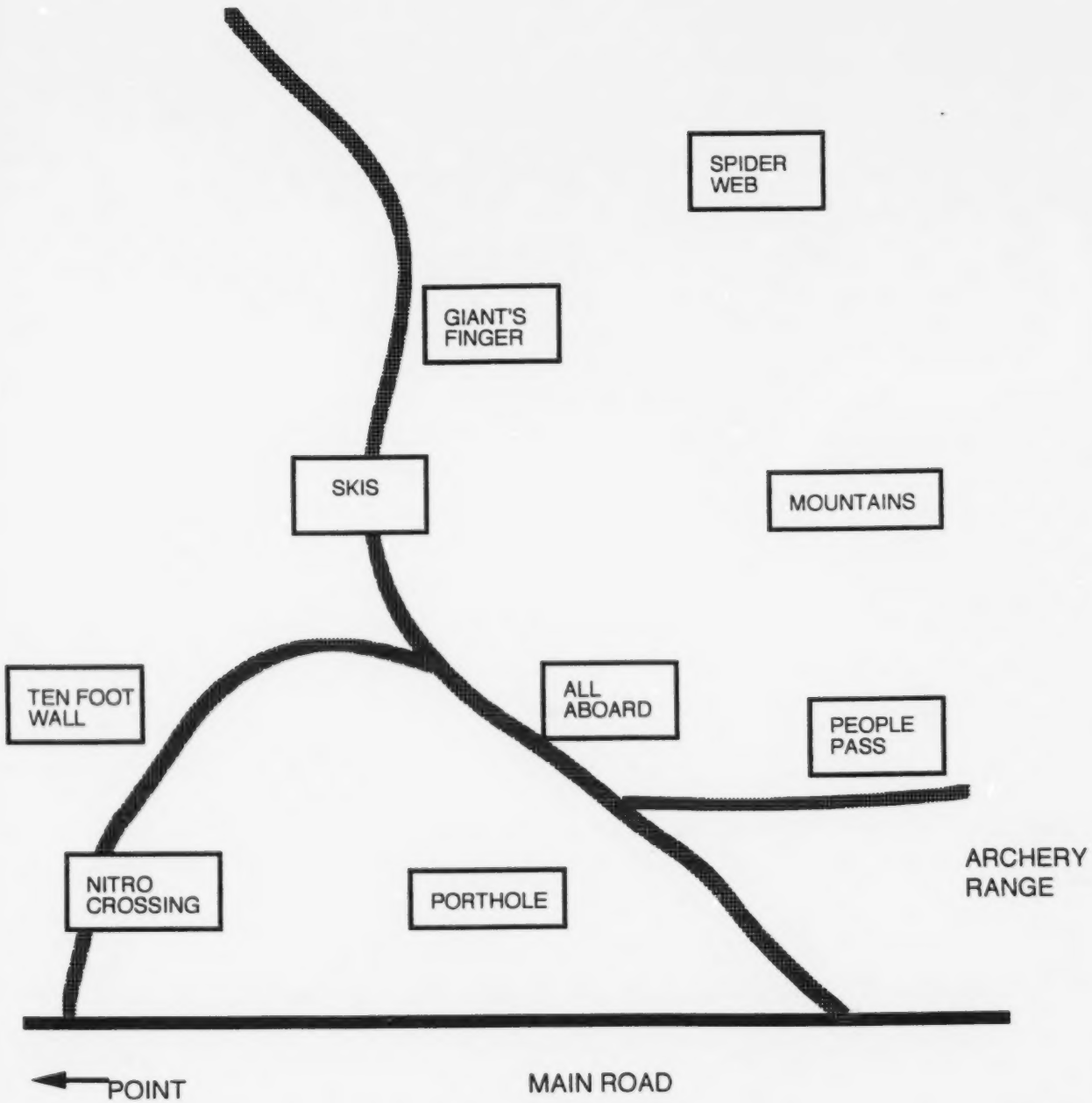
KNOWLEDGE	**COMPREHENSION**	**APPLICATION**
Name	Tell in your own words	How could
List	Summarize	In what ways
Describe	Tell why	Choose

ANALYSIS	**SYNTHESIS**	**EVALUATION**
What are the causes	What do you think	Decide which
Explain	Suppose	Is it good that
Specify	How else could you	Predict

MAP OF THE CHALLENGE COURSE



MAP OF THE SOUTHWEST LOOP



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